Panasonic

Fire alarm systems Enclosed analog heat detector 3309

- Different modes for compatibility with other EBL systems / detectors
- Algorithms for class A1, A2 S or B S
- ⟨Ex⟩ ATEX compliance
- Waterproof (IP67)

General

The analog heat detector 3309 measures the temperature through a thermistor. The temperature range is 0°C to 100°C in steps of 0.5°C. The detector has an LED that will light up when the detector goes into alarm. The detector also has an output for an external LED, e.g. 2218.

Programming/Compatibility

The address setting tool 3314 is used to set the detector's COM loop address. The detector has an address label inside, where the address is to be written.

3314 is also used to set the detector mode.

- **NORMAL** mode (analog): Used in the system EBL512 (SW version ≥2.0) and EBL128. The detector works as a temperature sensor where the analog readings (0°C to 100°C) are converted to digital "sensor values" that are read and evaluated by the c.i.e. Algorithms for class A1, A2 S or B S (set in Win512). When the class A1 or A2 S algorithm is used, 3309 is a spare part for detector 2340 and when the class B S algorithm is used, 3309 is a spare part for 2341.

- **2330** mode (conventional): Used in the systems EBL512 / 1000 / 2000 as an equivalent to the enclosed addressable fixed temperature heat detector 2340 (60°C), i.e. as a class A2 S heat detector (static response temperature 57°C).

- **2312** mode: Not used for 3309.

Algorithms

EBL512 / EBL128 use algorithms for class A1, A2 S and B S, according to EN54-5:2000, for fire alarm detection. Via Win512 / Win128 is an algorithm selected for each 3309 in NORMAL mode.

⟨Ex⟩ ATEX classification

3309 complies with the ATEX classification **Ex II 3GD EEx nA II T5**.

Waterproof

The thermistor, the LED, all electronics, etc. is mounted in a waterproof detector housing, mounted on a connection box.

Label holder

A label holder, intended for a label showing "zone-address" or "technical number", can be mounted in the connection box.

Miscellaneous

The COM loop is connected to the detector, which is provided with three pairs of flying leads with female push-on connectors.

Product applications

Used in the systems **EBL512** / **128** / 1000 / 2000.

Heat detectors are normally used where smoke detectors can not be used or in rooms where the temperature can be expected to rise rapidly in case of a fire.

The detector is intended for outdoor use (must not be exposed to heavy sunlight) or in high humidity indoor premises.

BVQi
ISO 9001

NATIONAL ACCREDITATION OF CERTIFICATION BODIES

Type numbers	
3309	Enclosed analog heat detector (incl. conn. box, 3 compr. glands and gasket)
3390	Label holder (100 holders per packet, excl. labels)
3391	Labels for 3390 (10 sheets à 132 labels)
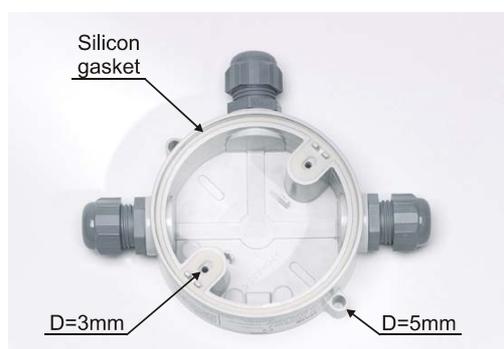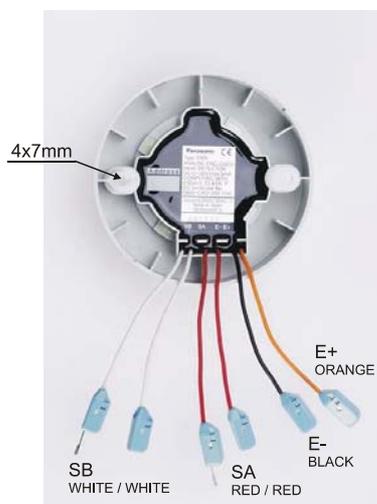
Connection box mounting holes (2 x 5 mm) c/c = 108 mm. The connection box is prepared for required number of compression glands, two (in / out) or three (in / out / ext. LED). A gland is approx. 30 mm high.

Detector mounting holes, (2 x 4 x 7 mm) c/c = 70 mm. **SA / SB** (Red/White) = COM loop in and out respectively. One SA and one SB connector is provided with a short "wire" to be used to connect the Address setting tool 3314 during mode and address setting. The "wires" are to be pulled out before the COM loop wires are connected. **E+ / E-** = Ext. LED (cable length max. 30 m). Connectors for wire diameter 0.6 – 1.2 mm (0.3 – 1.13 mm^2 approx.).

Technical data	

Voltage (V DC)
  rated
  allowed
  normal (on the COM loop)
	
	28
	12-30
	24

Current consumption at norm. volt. (mA)
  quiescent
  active (incl. internal LED)
  ext. LED
	
	0.185
	1.650
	≤ 2

Internal capacitance (nF) Internal inductance	0 0

Ambient temperature (°C)
  operating
    (Min. / Typical / Max.)
    (Min. / Typical / Max.)
  storage
	Depending on the mode.
	NORMAL mode (Class is depending on the algorithm)
	Class **A1**: -20 /+25 /+50, **A2 S**: -20 /+25 /+50 or **B S**: -20 /+40 /+65
	2330 mode: -20 /+25 /+50
	-45 to +70

Ingress Protection rating	IP67 (attached connection box, silicon gasket and compression glands are required)
Sensitivity (°C) Static response temperature (range)	NORMAL mode: Depending on the algorithm. Class **A1**: 54-65, **A2 S**: 54-70 & **B S**: 69-85 2330 mode: Class **A2 S**: 57
Size $\varnothing$ x H (mm)	100 x 78
Weight (g)	Detector: 112 Connection box (incl. 3 glands): 134
Construction / Colour	Modified Polycarbonate / Grey (N8, Munsell colour code)
Approvals	$C \in$ 05 EC Certificate no. 0845-CPD-232.1190 NORMAL mode: EN54-5:2000: Class P (depending on algorithm). 2330 mode: EN54-5:2000: Class A2 S.
ATEX classification	$\langle Ex \rangle$ II 3GD EEx nA II T5 (T70°C), -20°C $\leq T_a \leq$ 65°C

All technical features and data are subject to changes without notice, resulting from continuous development and improvement.

Product Leaflet	Date of issue	Revision / Date of revision
MEW00133	2001-10-19	8 / 2008-10-10